



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,936	08/03/2001	Toshiaki Watanabe	211559US-2SRD DIV	9949

22850 7590 03/28/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

BOAKYE, ALEXANDER O

ART UNIT	PAPER NUMBER
----------	--------------

2667

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/920,936	WATANABE ET AL.	
	Examiner	Art Unit	
	ALEXANDER BOAKYE	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-30 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/18/03;6/3/03</u> | 6) <input type="checkbox"/> Other: _____ |

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4 are rejected under the judicially created doctrine of obviousness-double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,310,897. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-4 of the instant application merely broadens the scope of the claim 1 of the patent by eliminating the elements and their functions of the claims. It has been held that the omission an element and its function is an obvious expedient if the remaining elements perform the same function as before. *In re Karlson*, 136 USPQ 184 (CCPA). Also note *Ex parte Rainu*, 168 USPQ 375 (Bd. App. 1969) ; omission of a

Art Unit: 2667

reference element whose function is not needed would be obvious to one skilled in the art.

Allowable Subject Matter

Claims 5, 7-10, 6, 11, 13-17, 12, 18-19, 20-21, 22, 23, 25, 24, 26, 27, 28, 29-50 are allowable.

The following is a statement of reasons for the indication of allowable subject matter:

As to claims 5, 7-10, the prior art of reference does not teach means for segmenting encoded information into not less than two layers, and adding a sync signal and header information required for decoding to each layer; means for transmitting, as reconstruction information for reconstructing the encoded information, information which has already been transmitted from the upper layer or part of the information, information which has already been transmitted within the same layer or part of the information, or information for reconstructing contents of information which has already been transmitted from the upper layer or within the same layer or contents of part of the information, upon adding the information to the encoded information; and means for inserting designation information with a predetermined bit pattern which indicates addition of the reconstruction information in the header information.

As to claim 6, the prior art of record does not teach means for adding a sync signal to header information required for encoding, and encoding the information; means for transmitting, as reconstruction information for

Art Unit: 2667

reconstructing the encode information, information which has already been transmitted or part of the information or information indicating contents of the information or contents of part of the information, upon adding the information to the encoded information; and means for inserting designation information with a predetermined bit pattern which indicates addition of the reconstruction information in the header information.

As to claims 11,13-17, the prior art of record does not teach means for segmenting encoded information into not less than two layers, and adding a sync signal and header information required for decoding to each layer; means for detecting designation information having a predetermined bit pattern from the header information; and means for decoding the encoded information by using information, transmission of which is indicated by the detected designation information, as a substitute for information which has already been transmitted from the upper layer or part which has already been transmitted within the same layer or part of the information, or information for reconstructing contents of information which has already been transmitted from the upper layer or within the same layer or contents of part of the information.

As to claim 12, the prior art of record does not teach means for receiving encoded information which is transmitted after a sync signal and header information required for decoding are added to the encoded information; means for detecting designation information having a predetermined bit pattern from the header information) and means for, when the pattern is detected, decoding

Art Unit: 2667

the encoded information by using information, transmission of which is indicated by the designation information as a substitute for information which has already been transmitted or part of the information or information capable of reconstructing contents of the information or contents of part of the information.

As to claims 18-19, the prior art of record does not teach encoding means for receiving and compress-encoding a picture signal; multiplexing means for picture code stream output from each of said picture encoding means and other data information code streams, and outputting a multiplexing code stream containing a multiplexed header and a multiplexed payload; means for inserting header information contained in the picture code stream or part thereof in the Multiplexed header; and multiplexing a error correction/detection information in the multiplexed code generated from header to the multiplexed header, providing error protection for the header information in the picture code stream together with another information associated with multiplexing in the multiplexed header by using an error correction/detection code, and transmitting the header information and other information.

As to claims 20-21, the prior art of record does not teach demultiplexing means for receiving a multiplexing code stream which is generated by multiplexing a picture code stream and other code streams and contains a multiplexed header and a multiplexed payload, with error correction being provided for header information in the picture code stream or part of the information, together with another information associated with multiplexing in the multiplexed header, by using an error correction/detection code, and

Art Unit: 2667

demultiplexing the multiplexing code stream into one or a plurality of Picture code streams and other data information code streams; picture decoding means for decoding the demultiplexed picture code stream; and means for, when an error is detected in header information in the picture code stream, decoding the picture code stream by using the header information in the picture code stream which is contained in the multiplexed header.

As to claim 22, the prior art of record does not teach a recording medium on which a code stream is recorded, the code stream having header information and reconstruction information added thereto, the header information being required for decoding, the reconstruction information being used to reconstruct contents of the header information or contents of part of the header information, and the code stream being decoded by using the reconstruction as a substitute for the header information when an error is detected in the header information apparatus or part thereof by a decoding apparatus.

As to claims 23 and 25, the prior art of record does not teach a encoding/multiplexing apparatus comprising: means for segmenting a plurality of types of compressed code strings obtained by-compress-encoding an input signal in encoding units; means for generating a multiplexed unit code stream having a length corresponding to an integer multiple of a predetermined length by adding stuffing bits to the compressed code string in segmenting units; and means for generating a multiplexing code stream by multiplexing the multiplexed unit code strings.

As to claims 24 and 26, the prior art of record does not teach

Art Unit: 2667

A decoding/demultiplexing apparatus comprising: means for receiving a multiplexing code stream and demultiplexing means for a multiplexed unit code stream; a means separating a compressed code string in the multiplexed unit code stream from stuffing bits added thereto; means for decoding the separated compressed code string; and means for detecting an error in the multiplexing code stream by comparing a position at which decoding of the compressed code string by the decoding means is ended with a start position of the stuffing bits.

As to claim 27, the prior art of record does not teach encoding/multiplexing apparatus comprising: compress-encoding means for encoding an input signal so as to segment the signal in given encoding units, thereby generating compressed code strings; means for generating a multiplexing code stream by collecting sync words having the same degree of importance from the segmented compressed code strings; and means for inserting codes indicating delimiters in the encoding units in the multiplexing code stream generated in accordance with the degrees of importance.

As to claim 28, the prior art of record does not teach decoding/demultiplexing apparatus comprising: means for demultiplexing a multiplexing code stream obtained by collecting compressed code strings in accordance with the degrees of importance of code words and multiplexing the compressed code strings; means for specifying encoding units corresponding to segmented code streams by detecting codes indicating code delimiters in the multiplexing code stream; means for generating a compressed code stream by collecting code strings corresponding to identical code delimiters from the

Art Unit: 2667

multiplexing code stream which is multiplexed in accordance with the degrees of importance; and means for decoding the compressed code stream.

As to claims 29-30, the prior art of record does not teach segmenting the encoded data into a plurality of layers, adding important header information required for decoding to at least some of upper and lower layers, and transmitting the data.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Boakye whose telephone number is (571) 272-3183. The examiner can normally be reached on M-F from 8:30am to 6:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached on (571) 272-3179. The fax number is 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 305-4750.

Alexander Boakye

Patent Examiner

AB

3/14/05


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 3/18/05